## MONTHLY WEATHER REVIEW,

**AUGUST, 1876.** 

## WAR DEPARTMENT,

Office of the Chief Signal Officen,

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND ACRICULTURE.

## INTRODUCTION.

In compiling the present Review, the usual data have been made use of. The most noticeable features of the month are: the movements of the low pressure-areas; the high mean temperatures in the northern, central and eastern districts; the small total rain-falls in the northeastern districts, with resulting droughts and numerous, extensive and destructive forest-fires; the grasshoppers in the northwestern States and Territories.

## BAROMETRIC PRESSURE.

In general. The general distribution of the atmospheric pressure for the month is represented upon chart No. II by the isobaric curves. For Mt. Washington, the mean is 30.31 in., and for Pike's Peak, 30.23 in. Excepting these, the highest means have been reported from Portland, Or., and the stations along the Atlantic coast, from Florida to southern New England; the lowest from Fort Gibson, 29.77, Bismarck, 29.70, Dodge City, 29.52, and North Platte, 29.47 in. The ranges in the barometers are, for Key West, .24 of an inch; San Francisco, .33; Gulf States, .30 to .43; Teames and the Ohio valley, .29 to .42; South Atlantic States, .41 to .47; Middle Atlantic States, .42 to .50; Upper Mississippi valley, .42 to .69; Lower Lake region, .53 to .57; Upper Lake region, .53 to .66; New England, .53 to .72; Rocky Mountain stations, .40 to .64; Lower Missouri valley, .62 to .93, and western portions of Kausas, Nebraska and Dakota, .96 to 1.24 at Bismarck.

Areas of high pressure.—Seven have crossed the northern sections of the country during the month-As the intervals between their passage were comparatively short, the periods of warm weather, caused by the movement of the low-pressure areas, were generally of short duration, excepting for the Gulf States.

No. I.—At 7:35 a. m. of the 1st, this high-pressure area extended from the Lakes to the St. Lawrence valley, with a barometric ridge running to the Western Gulf States, and was accompanied by cool, clear weather. By morning of the 2nd, the pressure had considerably increased in the northern sections, and isobar 30.30 inches included New England and New Brunswick. During the 2nd, 3rd, and 4th, it increased in the South Atlantic States, and succeeding low pressure, No. I, diminished in the northern sections, especially in the Northwest and Lake region, in advance of low pressure No. II, and continued highest over New England. In connection with low pressure No. 1, brisk and occasionally high north to east winds, and heavy seas were produced along the coast from New Jersey to North Carolina on the 1st and 2nd. In lat. 37° 78 N, long. 73° 10 W, a southwest gale was experienced on the 2nd, and a northeast gale on the 3rd. On the morning of the 5th, the highest pressure, above 30.10, covered the Atlantic States, continued increasing in the Southern States during the 5th and 6th, and was central in Georgia at 7:35 a. m. of the 7th, after which it lost its distinctive features. Cautionary Signals were ordered on the 1st and 2nd along the South and Middle Atlantic coasts, which were justified except at Tybee Island, Ga., Kittyhawk, Cape Henry and Norfolk.

No. II.—Following low pressure No. II, it passed over the Missouri and Upper Mississippi valleys during the 5th and 6th, but was of little interest. It moved to the Upper Lake region on the 7th. On the morning of the 8th, with No. I., an extensive area, included by isobar 30.10, reached from the Lakes to the Southern States east of the Mississippi. At 7:35 a. m. of the 10th, it covered the Atlantic States, where it continued, with increased pressure, on the 11th and 12th, and then gradually disappeared off the New England coast on the 13th and 14th.

No. III.—On the 7th and 8th it was felt at Portland, Or., reaching its maximum on the morning of the